

- Municipal Population Register: a pilot study]. *Ned Tijdschr Geneesk* 2003;**147**:2286–90.
- 6 **US Department of Health and Human Services**. *International statistical classification of diseases, injuries and causes of death*, 9th rev. Clinical modification. Washington: US Department of Health and Human Services, 1979.
 - 7 **Rothman KJ**, Greenland S. Introduction to categorical statistics. Person-time data: large-sample methods; and Introduction to stratified analysis, Standardization. In: *Modern epidemiology*, 2nd ed. Philadelphia: Lippincott Williams and Wilkins, 1998.
 - 8 **De Bruin A**, Kardaun JWPF, Gast A, *et al*. Record linkage of hospital discharge register with population register: experiences at Statistics Netherlands. *Stat J UN Econ Comm Eur* 2004;**21**:23–32.
 - 9 **Paas GRA**, Veenhuizen KCW. [Research on the validity of the LMR]. Utrecht: Prismant, 2002 (in Dutch).
 - 10 **Linnarsjö A**, Hammar N, Gustavsson A, *et al*. Recent time trends in acute myocardial infarction in Stockholm, Sweden. *Int J Cardiol* 2000;**76**:17–21.
 - 11 **Salomaa V**, Ketonen M, Koukkunen H, *et al*. Trends in coronary events in Finland during 1983–1997. The FINAMI study. *Eur Heart J* 2003;**24**:311–9.
 - 12 **Rosamond WD**, Folsom AR, Chambless LE, *et al*. Coronary heart disease trends in four United States communities. The atherosclerosis risk in communities (ARIC) study 1987–1996. *Int J Epidemiol* 2001;**30**:S17–22.
 - 13 **Salomaa V**, Ketonen M, Koukkunen H, *et al*. Decline in out-of-hospital coronary heart disease deaths has contributed the main part to the overall decline in coronary heart disease mortality rates among persons 35–64 years of age in Finland: the FINAMI study. *Circulation* 2003;**108**:691–6.
 - 14 **Goraya TY**, Jacobsen SJ, Kottke TE, *et al*. Coronary heart disease death and sudden cardiac death: a 20-year population-based study. *Am J Epidemiol* 2003;**157**:763–70.
 - 15 **Hofman A**, Grobbee DE, de Jong PT, *et al*. Determinants of disease and disability in the elderly: the Rotterdam elderly study. *Eur J Epidemiol* 1991;**7**:403–22.
 - 16 **Boersma E**, Mercado N, Poldermans D, *et al*. Acute myocardial infarction. *Lancet* 2003;**361**:847–58.
 - 17 **Wong CK**, White HD. Recognising “painless” heart attacks. *Heart* 2002;**87**:3–5.
 - 18 **Van Leest LATM**, Koek HL, Bots ML, *et al*. [Cardiovascular disease in the Netherlands 2002: figures about morbidity and mortality]. The Hague: Netherlands Heart Foundation, 2002 (in Dutch).

IMAGES IN CARDIOLOGY

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Use of magnetic resonance imaging in the diagnosis of aneurysm of fossa ovalis

A 15 year old active female with a clinical transient ischaemic attack was referred to our institute to rule out a cardioembolic origin to the episode. Magnetic resonance (MR) imaging revealed a mobile atrial septal aneurysm into the right atrium during systole with a 17 mm protrusion beyond the plane of the interatrial septum and a diameter of the base of aneurysm portion of the interatrial septum of 16 mm (panels A and B, videos 1 and 2: to view video footage visit the *Heart* website—<http://www.heartjnl.com/supplemental>). The use of high resolution cine gradient echo sequence is particularly sensitive for detecting slow flow and is able to differentiate it from a mass. The aneurysm of the fossa ovalis in this sequence showed slow flow and it might indicate the possibility of formation of thrombi in the saccular cavity (panel A)

Aneurysm of the fossa ovalis is a protruding, space occupying, atrial septal structure clinically identified by serial imaging modalities. An association between atrial septal aneurysm and focal cerebral ischaemic events (stroke and transient ischaemic attack) has been suggested. Nevertheless, the role of aneurysm of the fossa ovalis as a risk factor for cerebral ischaemia is poorly defined. MR imaging techniques such as phase contrast sequences allow quantification of blood velocity profiles through these septal defects at different times during the cardiac cycle.

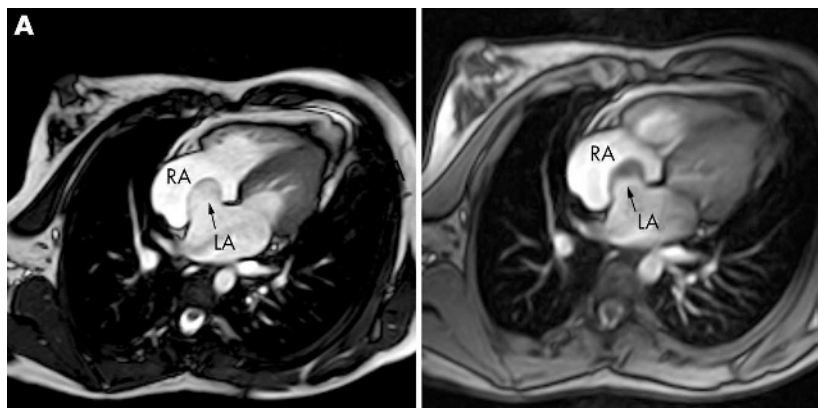
This case indicates the potential of cardiac MR imaging in the evaluation of aneurysm of the fossa ovalis as a potential source of embolism.

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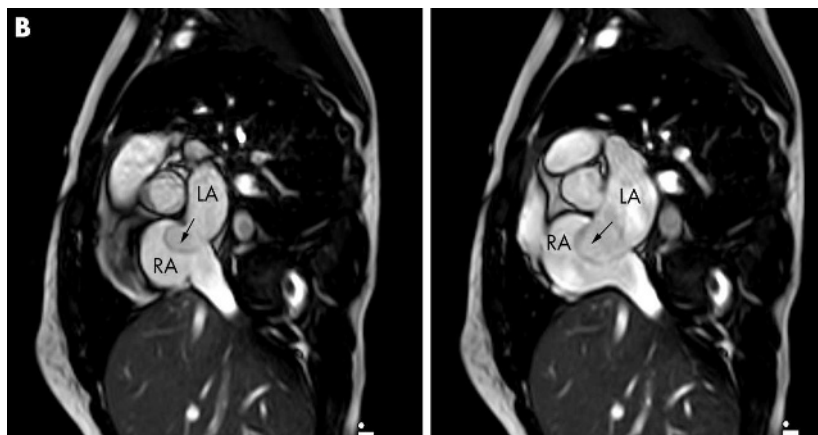
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Left: Cine gradient sequence in four chamber view showing a mobile atrial septal aneurysm into the right atrium (arrows). Right: Same plane with slow flow effect in the saccular cavity. LA, left atrium; RA, right atrium.



Left: Cine gradient sequence in systolic sagittal view. Right: Cine gradient sequence in diastolic sagittal view showing atrial septal aneurysm (arrows).